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Sequence Listing was accepted.

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Reviewer: Anne Corrigan

Timestamp: [year=2009; month=5; day=7; hr=15; min=2; sec=57; ms=396; ]

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Application No: 10584362 Version No: 2.0

Input Set:

Output Set:

**Started:** 2009-05-01 08:41:20.339  
**Finished:** 2009-05-01 08:41:25.191  
**Elapsed:** 0 hr(s) 0 min(s) 4 sec(s) 852 ms  
**Total Warnings:** 30  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 30  
**Actual SeqID Count:** 30

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (1)
W 402	Undefined organism found in <213> in SEQ ID (2)
W 402	Undefined organism found in <213> in SEQ ID (3)
W 402	Undefined organism found in <213> in SEQ ID (4)
W 402	Undefined organism found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 402	Undefined organism found in <213> in SEQ ID (13)
W 402	Undefined organism found in <213> in SEQ ID (14)
W 402	Undefined organism found in <213> in SEQ ID (15)
W 402	Undefined organism found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

**Input Set:**

**Output Set:**

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**Total Warnings:** 30  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 30  
**Actual SeqID Count:** 30

Error code	Error Description
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W 213	Artificial or Unknown found in <213> in SEQ ID (22)
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W 213	Artificial or Unknown found in <213> in SEQ ID (25)
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# SEQUENCE LISTING

<110> Bos, Martine Petronella  
 Poolman, Jan  
 Tefsen, Boris  
 Tommassen, Johannes Petrus Maria

<120> OUTER MEMBRANE VESICLES AND USES THEREOF

<130> VB60639

<140> 10584362

<141> 2006-06-23

<150> PCT/EP2004/014770

<151> 2004-12-21

<150> GB 0329827.0

<151> 2003-12-23

<150> GB 0416398.6

<151> 2004-07-22

<160> 30

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 802

<212> PRT

<213> Neisseria

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Thr	Asp	Asn	Pro	Thr	Ala	Gly	Glu	Ser	Val	Arg	Ser	Val	Ser	Glu	Pro
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Asn	Glu	Ser	Gly	Ser	Pro	Glu	Arg	Thr	Glu	Ala	Ala	Val	Gln	Gly	Ser
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Gln	Ser	Gly	Asp	Thr	Val	Thr	Ala	Gly	Asp	Arg	Phe	Ala	Leu	Gln	Gln
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Asp	Gly	Thr	Leu	Ile	Arg	Gly	Glu	Thr	Leu	Thr	Tyr	Asn	Leu	Glu	Gln
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Ile	Phe	Tyr	Thr	Pro	Trp	Ala	Asp	Phe	Pro	Leu	Asp	Gly	Asn	Arg	Lys		
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Ser	Gly	Leu	Leu	Val	Pro	Ser	Leu	Ser	Ala	Gly	Ser	Asp	Gly	Val	Ser		
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Lys	Glu	Ile	Ala	Gly	Asn	Val	Asn	Leu	Asn	Arg	Arg	Val	Trp	Leu	Asp		
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Tyr	Gly	Gly	Arg	Ala	Ala	Gly	Gly	Ser	Leu	Asn	Ala	Gly	Leu	Ser	Val		
385					390					395					400		
Leu	Lys	Tyr	Gln	Thr	Leu	Ala	Asn	Gln	Ser	Gly	Tyr	Lys	Asp	Lys	Pro		
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Asp Ser Ser Ile His	Tyr Asn Gln Asn Asp Lys	Arg Ala Glu Asn Tyr
645	650	655
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Ser Tyr Phe Tyr Asp	Lys Leu Ser Gln Leu Asp	Leu Ser Ala Gln Trp
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Pro Leu Thr Arg Asn	Leu Ser Ala Val Val Arg	Tyr Asn Tyr Gly Phe
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Glu Ala Lys Lys Pro	Ile Glu Val Leu Ala Gly	Ala Glu Tyr Lys Ser
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Ser Cys Gly Cys Trp	Gly Ala Gly Val Tyr Ala	Gln Arg Tyr Val Thr
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Gly Glu Asn Thr Tyr	Lys Asn Ala Val Phe Phe	Ser Leu Gln Leu Lys
755	760	765
Asp Leu Ser Ser Val	Gly Arg Asn Pro Ala Asp	Arg Met Asp Val Ala
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 <213> N. meningitidis

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35	40 45
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50	55 60
Ala Ala Pro Pro Glu Leu Ser Ala Ala Ala Gly Ile Ile Ser Thr Leu	
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Gln Asn Trp Arg Glu Gln Phe Thr Tyr Met Val Trp Gly Thr Glu Asn	
85	90 95
Lys Ile Trp Thr Val Pro Leu Phe Leu Ile Ile Leu Val Val Ile Arg	
100	105 110
Gly Ile Cys Arg Phe Thr Ser Thr Tyr Leu Met Thr Trp Val Ser Val	
115	120 125
Met Thr Ile Ser Lys Ile Arg Lys Asp Met Phe Ala Lys Met Leu Thr	
130	135 140
Leu Ser Ser Arg Tyr His Gln Glu Thr Pro Ser Gly Thr Val Leu Met	
145	150 155 160
Asn Met Leu Asn Leu Thr Glu Gln Ser Val Ser Asn Ala Ser Asp Ile	
165	170 175
Phe Thr Val Leu Thr Arg Asp Thr Met Ile Val Thr Gly Leu Thr Ile	
180	185 190

Val	Leu	Leu	Tyr	Leu	Asn	Trp	Gln	Leu	Ser	Leu	Ile	Val	Val	Leu	Met	195	200	205
Phe	Pro	Leu	Leu	Ser	Leu	Leu	Ser	Arg	Tyr	Tyr	Arg	Asp	Arg	Leu	Lys	210	215	220
His	Val	Ile	Ser	Asp	Ser	Gln	Lys	Ser	Ile	Gly	Thr	Met	Asn	Asn	Val	225	230	235
Ile	Ala	Glu	Thr	His	Gln	Gly	His	Arg	Val	Val	Lys	Leu	Phe	Asn	Gly	245	250	255
Gln	Ala	Gln	Ala	Ala	Asn	Arg	Phe	Asp	Ala	Val	Asn	Arg	Thr	Ile	Val	260	265	270
Arg	Leu	Ser	Lys	Lys	Ile	Thr	Gln	Ala	Thr	Ala	Ala	His	Ser	Pro	Phe	275	280	285
Ser	Glu	Leu	Ile	Ala	Ser	Ile	Ala	Leu	Ala	Val	Val	Ile	Phe	Ile	Ala	290	295	300
Leu	Trp	Gln	Ser	Gln	Asn	Gly	Tyr	Thr	Thr	Ile	Gly	Glu	Phe	Met	Ala	305	310	315
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Cys	Ala	Phe	Leu	Asp	Thr	Pro	Pro	Glu	Gln	Asp	Lys	Gly	Thr	Leu	Ala	355	360	365
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Leu	Lys	Asp	Ala	Pro	Ile	Leu	Leu	Leu	Asp	Glu	Ala	Thr	Ser	Ala	Leu	530	535	540
Asp	Asn	Glu	Ser	Glu	Arg	Leu	Val	Gln	Gln	Ala	Leu	Glu	Arg	Leu	Met	545	550	555
Glu	Asn	Arg	Thr	Gly	Ile	Ile	Val	Ala	His	Arg	Leu	Thr	Thr	Ile	Glu	565	570	575
Gly	Ala	Asp	Arg	Ile	Ile	Val	Met	Asp	Asp	Gly	Lys	Ile	Ile	Glu	Gln	580	585	590
Gly	Thr	His	Glu	Gln	Leu	Met	Ser	Gln	Asn	Gly	Tyr	Tyr	Thr	Met	Leu	595	600	605
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<213> N. meningitidis

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<212> PRT  
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Leu Asn Ser Ala Ala Arg Asn Ala Pro Ala Gly Ser Gln Pro Val Lys
      35             40             45
Ala Glu Leu Trp Lys Arg Val Tyr Ser Arg Val Gly Ser Tyr Trp Lys
      50             55             60
Gly Leu Val Leu Ala Val Leu Leu Met Ala Gly Ala Ala Ala Thr Gln
65             70             75             80
Pro Thr Leu Ala Val Ile Met Lys Pro Leu Leu Asp Asp Gly Phe Ser
      85             90             95
Gly Ala Lys Pro His Tyr Val Trp Phe Leu Pro Leu Ala Val Val Gly
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Ala	Trp	Val	Ala	Asn	Asn	Val	Leu	Arg	Gly	Ile	Arg	Gly	Glu	Met	Phe			
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Glu	Arg	Leu	Leu	Gly	Leu	Pro	Asp	Ala	Asp	Phe	Lys	Arg	Gly	Asp	Thr			
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Tyr	Ala	Thr	Asp	Val	Ile	Thr	Val	Leu	Val	Arg	Glu	Thr	Leu	Val	Val			
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Ile	Ala	Leu	Ile	Gly	Val	Leu	Leu	Tyr	Met	Ser	Trp	Ala	Leu	Thr	Leu			
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225					230						235				240			
Glu	Leu	Thr	Arg	Val	Val	Ser	Glu	Gly	Ile	Asp	Gly	Gln	Arg	Val	Ile			
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Lys	Leu	Phe	Asp	Gly	Tyr	Asp	Ala	Glu	Arg	Arg	Arg	Phe	Asp	Phe	Val			
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Asn	Ser	Arg	Leu	Arg	Arg	Phe	Ala	Met	Arg	Ser	Ala	Thr	Ala	Asp	Ala			
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Ala	Leu	Thr	Pro	Leu	Thr	Gln	Val	Cys	Ile	Ser	Val	Ala	Val	Gly	Ala			
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Val	Ile	Ala	Val	Ala	Leu	Ser	Gln	Ala	Asn	Ser	Gly	Ala	Leu	Thr	Val			
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Gly	Ser	Phe	Ala	Ser	Phe	Met	Ala	Ala	Leu	Ala	Gln	Ile	Phe	Asp	Pro			
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			340					345					350					
Ala	Ala	Glu	Ser	Val	Phe	Thr	Leu	Val	Asp	Gln	Thr	Pro	Glu	Ala	Asp			
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Ala	Gly	Thr	Arg	Ala	Leu	Pro	Glu	Pro	Val	Arg	Gly	Lys	Val	Glu	Phe			
	370					375					380							
Arg	Ala	Val	Ser	His	Arg	Phe	Pro	Asp	Ala	Asp	Arg	Asp	Thr	V				